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9
                        UNITED STATES DISTRICT COURT
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                      EASTERN DISTRICT OF WASHINGTON
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    COLUMBIA RIVERKEEPER,
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                   Plaintiff,
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                                                                CV-13-282-LRS
                                               COMPLAINT
    V.
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    UNITED STATES ARMY CORPS
    OF ENGINEERS; and
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    LIEUTENANT GENERAL
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    THOMAS P. BOSTICK, in his
    official capacity as the Commanding
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    General and Chief of Engineers of
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    the United States Army Corps of
    Engineers,
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                   Defendants.
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                              T.
                                    INTRODUCTION
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                This is a civil action by plaintiff Columbia Riverkeeper for
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    declaratory and injunctive relief to compel defendants the United States Army
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                                                      SMITH & LOWNEY, P.L.L.C.
    COMPLAINT - 1
                                                       2317 EAST JOHN STREET
                                                        SEATTLE, WA 98112
                                                         (206) 860-2883
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Corps of Engineers and Lieutenant General Thomas P. Bostick, in his official capacity as the Commanding General and Chief of Engineers of the United States Army Corps of Engineers (collectively, "Corps"), to comply with sections 301(a) and 402 of the Clean Water Act ("CWA"), 33 U.S.C. §§ 1311(a) and 1342, by discontinuing unpermitted discharges of pollutants from The Dalles Dam, John Day Dam, McNary Dam, Ice Harbor Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam (collectively, "Dams") located on the Columbia and Snake Rivers unless and until the Corps obtains National Pollutant Discharge Elimination System ("NPDES") permits authorizing the discharges.

- 2. This action is a citizen suit brought under section 505 of the CWA as amended, 33 U.S.C. § 1365.
- 3. The Corps owns and operates the hydroelectric Dams on the Columbia and Snake Rivers that discharge pollutants, including oils, greases, other lubricants, and cooling water and the heat associated therewith. These discharges are not authorized by NPDES permits, and therefore violate section 301(a) of the CWA, 33 U.S.C. § 1311(a).

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<sup>&</sup>lt;sup>1</sup> The terms "Dam" and "Dams" as used herein includes the Dam(s) and all associated structures and facilities, including turbines, powerhouses, transformers, spillways, navigation lock systems, fish passage facilities, and cranes.

4. Columbia Riverkeeper seeks a declaratory judgment, injunctive relief, and the award of costs, including attorneys' and expert witnesses' fees.

### II. JURISDICTION AND VENUE

- 5. The Court has subject matter jurisdiction over Columbia Riverkeeper's claims under section 505(a) of the CWA, 33 U.S.C. § 1365(a), 28 U.S.C. § 1331 (federal question), and 28 U.S.C. § 1346(a)(2) (United States as Defendant). Section 505(a) and (d) of the CWA, 33 U.S.C. § 1365(a) and (d), authorizes the requested relief. The requested relief is also proper under 28 U.S.C. § 2201 (declaratory relief) and 28 U.S.C. § 2202 (injunctive relief).
- 6. Section 505(a) of the CWA, 33 U.S.C. § 1365(a), waives the sovereign immunity of the Corps for Columbia Riverkeeper's claims.
- 7. In accordance with section 505 (b)(1)(A) of the CWA, 33 U.S.C. § 1365(b)(1)(A), and 40 C.F.R. § 135.2, Columbia Riverkeeper notified the Corps of its violations of the CWA and of Columbia Riverkeeper's intent to sue by letter dated May 22, 2013 ("Notice Letter"). A copy of the Notice Letter is attached to this complaint as Exhibit 1. The allegations in sections III and IV.B through IV.H of the Notice Letter are incorporated herein by this reference. In accordance with section 505 (b)(1)(A) of the CWA, 33 U.S.C. § 1365(b)(1)(A), and 40 C.F.R. § 135.2(a)(3), Columbia Riverkeeper provided copies of the Notice Letter to the Administrator of the United States Environmental Protection Agency ("EPA"), the COMPLAINT 3

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29 COMPLAINT - 4

Regional Administrator of Region 10 of the EPA, the Attorney General of the United States, and the Director of the Washington Department of Ecology ("Ecology").

- At the time of the filing of this Complaint, more than sixty days have 8. passed since the Notice Letter and the copies thereof were issued as described in the preceding paragraph.
- 9. Neither the EPA nor Ecology has commenced any action constituting diligent prosecution to redress these violations.
- 10. The violations complained of in the Notice Letter are continuing or are reasonably likely to continue to occur. The Corps is in violation of the CWA.
- 11. The sources of the violations complained of are located in Klickitat County, Benton County, Walla Walla County, Franklin County, Whitman County, Columbia County, and Garfield County, Washington, within the Eastern District of Washington, and venue is therefore appropriate in the Eastern District of Washington under section 505(c)(1) of the CWA, 33 U.S.C. § 1365(c)(1).<sup>2</sup>

SMITH & LOWNEY, P.L.L.C.

<sup>&</sup>lt;sup>2</sup> John Day Dam and McNary Dam also discharge pollutants to waters within Sherman County, Oregon and Umatilla County, Oregon, respectively. Those discharges are not the subject of this Complaint, but are the subject of a separate

#### III. PARTIES

- 12. Plaintiff Columbia Riverkeeper is suing on behalf of itself and its members. Columbia Riverkeeper is a 501(c)(3) non-profit corporation registered in the State of Washington. The mission of Columbia Riverkeeper is to restore and protect the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. To achieve these objectives, Columbia Riverkeeper operates scientific, educational, and legal programs aimed at protecting water quality, air quality, and habitat in the Columbia River Basin.
- 13. Columbia Riverkeeper has representational standing to bring this action. Columbia Riverkeeper has over 3,000 members, many of which reside in Washington in the vicinity of waters affected by the Corps' illegal discharges of pollutants. Members of Columbia Riverkeeper use and enjoy the waters and the surrounding areas that are adversely affected by the Corps' discharges. Columbia Riverkeeper's members use these areas for, *inter alia*, fishing, rafting, hiking, walking, windsurfing, photographing, boating, and observing wildlife. The environmental, health, aesthetic, and recreational interests of Columbia Riverkeeper's members have been, are being, and will be adversely affected by the

Complaint being filed by Columbia Riverkeeper in the District Court for the District of Oregon.

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Corps' illegal discharges of pollutants from the Dams and by the members' reasonable concerns related to the effects of the discharges. The members are further concerned that, because these discharges are not subject to NPDES permits as required by the CWA, there are not sufficient restrictions imposed on, and monitoring and reporting of, the discharges to minimize the adverse water quality impacts of the discharges. These injuries are fairly traceable to the violations and redressable by the Court.

14. Columbia Riverkeeper has organizational standing to bring this action. Columbia Riverkeeper has been actively engaged in a variety of educational and advocacy efforts to improve water quality and to address sources of water quality degradation in the waters of the Columbia River and its tributaries, including the Snake River. The Corps' failure to obtain NPDES permits for its discharges has deprived Columbia Riverkeeper of information that would be required by the permits' monitoring and reporting conditions and available to Columbia Riverkeeper. This information could assist Columbia Riverkeeper in its efforts to educate and advocate for greater environmental protection. Thus, Columbia Riverkeeper's organizational interests have been adversely affected by the Corps' violations. These injuries are fairly traceable to the violations and redressable by the Court.

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- 15. Defendant United States Army Corps of Engineers is a federal agency within the Department of Defense. The United States Army Corps of Engineers owns and operates the dams that are the subject of this Complaint.
- 16. Defendant Lieutenant General Thomas P. Bostick is the Commanding General and Chief of Engineers of the United States Army Corps of Engineers.

  Mr. Bostick is being sued in his official capacity. As the Commanding General and Chief of Engineers, Mr. Bostick is responsible for ensuring the United States Army Corps of Engineers complies with applicable laws.

#### IV. LEGAL FRAMEWORK

- 17. Section 301(a) of the CWA, 33 U.S.C. § 1311(a), makes unlawful the discharge of any pollutant by any person unless authorized by, *inter alia*, a NPDES permit issued pursuant to section 402 of the CWA, 33 U.S.C. § 1342.
- 18. Section 502(12) of the CWA, 33 U.S.C. § 1362(12), defines "discharge of a pollutant" to include "any addition of any pollutant to navigable waters from any point source."
- 19. Section 502(7) of the CWA, 33 U.S.C. § 1362(7), defines the term "navigable waters" as "the waters of the United States, including the territorial seas."
- 20. Section 502(14) of the CWA, 33 U.S.C. § 1362(14), defines "point source" as "any discernible, confined and discrete conveyance, including but not COMPLAINT 7

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limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged."

#### V. **FACTUAL BACKGROUD**

## The Affected Community & Environment

- 21. The Columbia and Snake Rivers are two of the West's great river systems. These rivers support rich fishing traditions, provide water for communities and agriculture, recreation opportunities, and power for hydroelectric dams. The rivers are also severely degraded by pollution. Toxic pollution threatens the health of people that eat local fish and jeopardizes the public's right to eat fish caught locally. Rising water temperatures also threaten the health of salmon and other aquatic life that relies on cool water for survival.
- 22. In 2006 EPA designated the Columbia River Basin, which includes the Snake River, a Critical Large Aquatic Ecosystem because toxic contamination and other pollution are so severe. In 2009 EPA released an in-depth report on toxic pollution in the Columbia, the Columbia River Basin: State of River Report

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for Toxics.<sup>3</sup> EPA's report concluded that harmful pollutants are moving up the food chain, impacting humans, fish, and wildlife. As the report explains, "[i]n 1992, an EPA national survey of contaminants in fish in the United States alerted EPA and others to a potential health threat to tribal and other people who eat fish from the Columbia River Basin." This survey prompted further study on the contaminated fish and the potential impacts on tribal members.

23. In particular, EPA funded four Columbia River tribes, through the Columbia River Intertribal Fish Commission ("CRITFC"), to study contaminant levels in fish caught at traditional fishing sites.<sup>4</sup> The study demonstrated the presence of 92 toxic chemicals in fish consumed by tribal members, resulting in a 50-fold increase in cancer risk among tribal members whose diets rely on rivercaught fish. Contaminants found in these fish include PCBs, dioxins, furans, arsenic, mercury, and DDE, a toxic breakdown product of DDT.<sup>5</sup>

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<sup>&</sup>lt;sup>3</sup> U.S. EPA, Columbia River Basin State of River Report for Toxics (hereafter State of the River Report) (January 2009),

http://yosemite.epa.gov/r10/ecocomm.nsf/Columbia/SoRR/.

<sup>&</sup>lt;sup>4</sup>State of the River Report at 4.

<sup>&</sup>lt;sup>5</sup> *Id.* at 19.

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24. The CRITFC study is not alone in demonstrating the serious problem of toxic contamination. From 1989 to 1995, the Lower Columbia River Bi-State Water Quality Program ("Bi-State Program") generated substantial evidence showing that water and sediment in the Lower Columbia River and its tributaries have levels of toxic contaminants that are harmful to fish and wildlife. 6 The Bi-State Program concluded that:

- Dioxins and furans, metals, PCBs, PAHs, and pesticides impair the water sediment, and fish and wildlife;
- Arsenic, a human carcinogen, exceeded both EPA ambient water criteria for protection of human health and the EPA human health advisories for drinking water;
- Beneficial uses such as fishing, shellfishing, wildlife, and water sports are impaired;
- Many toxic contaminants are moving up the food chain and accumulating in the bodies of animals and humans that eat fish;

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<sup>&</sup>lt;sup>6</sup> Lower Columbia River Estuary Partnership. 2007. Lower Columbia River and Estuary Ecosystem Monitoring: Water Quality and Salmon Sampling Report at 1.

- People who eat fish from the lower Columbia over a long period of time are exposed to health risks from arsenic, PCBs, dioxins and furans, and DDT and its breakdown products.<sup>7</sup>
- 25. Other studies have confirmed and added to the overwhelming scientific evidence on toxic contamination in the Columbia River Basin.<sup>8</sup>
- 26. The pollution discharges that are the subject of this Complaint contribute to the pollution crisis on the Columbia and Snake Rivers. According to the National Oceanic & Atmospheric Administration ("NOAA"): "Spilled oil can harm living things because its chemical constituents are poisonous. This can affect organisms both from internal exposure to oil through ingestion or inhalation and from external exposure through skin and eye irritation. Oil can also smother some small species of fish or invertebrates and coat feathers and fur, reducing birds' and mammals' ability to maintain their body temperatures.<sup>9</sup>

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 $<sup>^{7}</sup>$  *Id.* at 5 - 6.

<sup>&</sup>lt;sup>8</sup> *Id.* at 6 (citing studies by USGS, the U.S. Army Corps of Engineers, DEQ, and others); *see generally* U.S. EPA, *State of the River Report*.

<sup>&</sup>lt;sup>9</sup> NOAA, Office of Response and Restoration, *How Oil Effects Fish and Wildlife in Marine Environments*, http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/how-oil-harms-animals-and-plants-marine-environments.html.

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27. The vicinity of the Dams that are the subject of this Complaint and the Columbia and Snake Rivers are used by the citizens of Washington and visitors, as well as by Columbia Riverkeeper's members, for recreational activities, including boating, biking, fishing and nature watching. Columbia Riverkeeper's members also derive aesthetic benefits from the receiving waters. Columbia Riverkeeper's members' enjoyment of these activities and waters is diminished by the polluted state of the receiving waters, shorelines, air and the nearby areas, and by the Corps' contributions to such polluted state.

## The Corps' Dams and Discharges of Pollutants

- 28. The Corps owns and operates the hydroelectric Dams on the Columbia and Snake Rivers.
- 29. The Dalles Dam is located on the Columbia River approximately two miles east of the city of The Dalles, Oregon. The Dalles Dam is located within Klickitat County, Washington. The discharges of pollutants to the Columbia River from The Dalles Dam that are the subject of this Complaint are made to waters located within Klickitat County, Washington The Columbia River is a navigable water body at the location of The Dalles Dam.
- 30. John Day Dam is located on the Columbia River near the city of Rufus, Oregon. John Day Dam is partially located within Klickitat County, Washington. The discharges of pollutants to the Columbia River from John Day SMITH & LOWNEY, P.L.L.C. COMPLAINT - 12 2317 EAST JOHN STREET

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Dam that are the subject of this Complaint are made to waters located within Klickitat County, Washington. <sup>10</sup> The Columbia River is a navigable water body at the location of the John Day Dam.

- 31. McNary Dam is located on the Columbia River near the city of Umatilla, Oregon. McNary Dam is partially located within Benton County, Washington. The discharges of pollutants to the Columbia River from McNary Dam that are the subject of this Complaint are made to waters located within Benton County, Washington. The Columbia River is a navigable water body at the location of the McNary Dam.
- 32. Ice Harbor Dam is located on the Snake River approximately ten miles east of Pasco, Washington. Ice Harbor Dam is located within Walla Walla

<sup>10</sup> The Corps also discharges pollutants to the Columbia River from John Day Dam to waters located within Sherman County, Oregon. Those discharges are not subject to this Complaint, but are the subject of a separate Complaint being filed by Columbia Riverkeeper in the District Court for the District of Oregon.

The Corps also discharges pollutants to the Columbia River from McNary Dam to waters located within Umatilla County, Oregon. Those discharges are not subject to this Complaint, but are the subject of a separate Complaint being filed by Columbia Riverkeeper in the District Court for the District of Oregon.

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County and Franklin County, Washington. The discharges of pollutants to the Snake River from Ice Harbor Dam that are the subject of this Complaint are made to waters located within Walla Walla County and Franklin County, Washington. The Snake River is a navigable water body at the location of the Ice Harbor Dam.

- 33. Lower Monumental Dam is located on the Snake River approximately six miles south of Kahlotus, Washington. Lower Monumental Dam is located within Walla Walla County and Franklin County. The discharges of pollutants to the Snake River from Lower Monumental Dam that are the subject of this Complaint are made to waters located within Walla Walla County and Franklin County, Washington. The Snake River is a navigable water body at the location of the Lower Monumental Dam.
- 34. Little Goose Dam is located on the Snake River approximately seven miles northeast of Starbuck, Washington. Little Goose Dam is located within Whitman County and Columbia County, Washington. The discharges of pollutants to the Snake River from Little Goose Dam that are the subject of this Complaint are made to waters located within Whitman County and Columbia County, Washington. The Snake River is a navigable water body at the location of the Little Goose Dam.
- 35. Lower Granite Dam is located on the Snake River approximately thirteen miles southwest of Pullman, Washington. Lower Granite Dam is located COMPLAINT 14

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within Whitman County and Garfield County, Washington. The discharges of pollutants to the Snake River from Lower Granite Dam that are the subject of this Complaint are made to waters located within Whitman County and Garfield County, Washington. The Snake River is a navigable water body at the location of the Lower Granite Dam.

- 36. The Dams use Kaplan turbines, which have variable pitch blades that can be adjusted to increase efficiency. The shaft and hubs of these turbines are filled with oil or another lubricant. This oil or lubricant leaks to surface waters from certain locations, including the turbine blade packing/seals, especially when the turbines are not properly maintained and/or operationally controlled. Available information indicates that the Corps has not properly maintained and/or operationally controlled the Kaplan turbines on the Dams in a manner to prevent or minimize discharges.
- 37. Upon information and belief, the Corps discharges oil or lubricant from each of the Kaplan turbines at the Dams each and every day. These discharges have occurred each and every day during the six years and sixty days prior to the filing of this Complaint, and are continuing to occur or are reasonably likely to reoccur. These discharges are not authorized by an NPDES permit.
- 38. Wicket gates control the amount of water flowing through the turbines at the Dams. The wicket gate bearings are lubricated with grease or another COMPLAINT 15

lubricant. This grease or lubricant is fed continuously into the bearings and

discharged into surface waters.

an NPDES permit.

permit.

39. Upon information and belief, the Corps discharges grease or another lubricant from the bearings at each of the turbine wicket gates at the Dams each and every day. These discharges have occurred each and every day during the six years and sixty days prior to the filing of this Complaint, and are continuing to

occur or are reasonably likely to reoccur. These discharges are not authorized by

40. Upon information and belief, the Corps discharges oils, greases, lubricants, and other pollutants at the Dams collected from various sources through sumps, including powerhouse drainage sumps, un-watering sumps, spillway sumps, navigation lock sumps, and other systems. These discharges have occurred each and every time during the six years and sixty days prior to the filing of this Complaint that the Corps made the discharges and are continuing to occur or are reasonably likely to reoccur. These discharges are not authorized by an NPDES

41. Upon information and belief, the Corps discharges cooling water, and the heat associated therewith, at the Dams that has been used to cool a variety of Dam components and materials, including turbines, generators, transformers, and lubricating oils. These discharges have occurred each and every day during the six COMPLAINT - 16

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years and sixty days prior to the filing of this Complaint, and are continuing to occur or are reasonably likely to reoccur. These discharges are not authorized by an NPDES permit.

- 42. Upon information and belief, the Corps also discharges oils, greases, lubricants, and other pollutants from the Dams due to spills, equipment failures, operator errors, turbine start-ups, and other similar events. The discharges that have been reported and that have occurred during the six years and sixty days prior to the filing of this Complaint are summarized in the tables attached hereto as Exhibits 2 through 8. 12 Discharges of this nature at the Dams are continuing to occur or are reasonably likely to reoccur. These discharges are not authorized by an NPDES permit.
- The discharges from the Dams described herein are discharges of 43. pollutants to navigable waters from point sources that violate section 301(a) of the CWA, 33 U.S.C. § 1311(a), if made without the authorization of a NPDES permit.
- 44. In accordance with section 505(c)(3) of the CWA, 33 U.S.C. § 1365(c)(3), and 40 C.F.R. § 135.4, plaintiff Columbia Riverkeeper will mail either

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<sup>&</sup>lt;sup>12</sup> Exhibits 2 through 8 detail specific reports of pollution at the Dams. Columbia Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Dams during those events.

filed, date-stamped copies or conformed copies of this Complaint after it is filed to the Administrator of the EPA, the Regional Administrator for Region 10 of the EPA, and the Attorney General of the United States.

#### VI. CAUSE OF ACTION

- 45. Columbia Riverkeeper realleges and incorporates by reference each and every allegation set forth in the paragraphs above.
- 46. The Corps is in violation of section 301(a) of the CWA, 33 U.S.C. § 1311(a), by discharging pollutants to navigable waters from the Dams as described herein without NPDES permit(s). These violations are violations of an "effluent standard or limitation" as defined by section 505(f) of the CWA, 33 U.S.C. § 1365(f).
- 47. On information and belief, these violations committed by the Corps are continuing or are reasonably likely to reoccur. Any and all additional violations of the CWA which occur after those described in the Notice Letter but before a final decision in this action should be considered continuing violations subject to this Complaint.

## VII. RELIEF REQUESTED

Wherefore, Columbia Riverkeeper respectfully requests that this Court grant the following relief:

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SMITH & LOWNEY, RL.L.C. 2317 EAST JOHN STREET BEATTLE. WA 98112 (206) 860-2883

|       | A.      | Issue a declaratory judgment that the Corps has violated and continues |
|-------|---------|--|
| to be | in viol | ation of section 301(a) of the CWA, 33 U.S.C. § 1311(a), by            |
| discl | narging | pollutants from the Dams to the Columbia and Snake Rivers without      |
| the a | uthoriz | ation of NPDES permits as described herein;                            |

- B. Issue an injunction enjoining the Corps from discharging pollutants from the Dams to the Columbia River or Snake River as described herein until such discharges are authorized by NPDES permits;
- C. Issue an injunction requiring the Corps to take specific actions to evaluate and remediate the environmental harm caused by its violations;
- D. Grant such other preliminary and/or permanent injunctive relief as Columbia Riverkeeper may from time to time request during the pendency of this case;
- E. Award Columbia Riverkeeper its litigation expenses, including reasonable attorneys' and expert witness fees, as authorized by section 505(d) of the CWA, 33 U.S.C. § 1365(d), any other applicable authorization; and
  - F. Grant such additional relief as this Court deems appropriate.

    RESPECTFULLY SUBMITTED this 31st day of July, 2013.

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Attorneys for plaintiff Columbia Riverkeeper

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# EXHIBIT 1

#### SMITH & LOWNEY, P.L.L.C.

2317 EAST JOHN STREET SEATTLE, WASHINGTON 98112 (206) 860-2883, FAX (206) 860-4187

May 22, 2013

### Via Certified Mail - Return Receipt Requested

Lieutenant General Thomas P. Bostick Commanding General & Chief of Engineers U.S. Army Corps of Engineers 441 G Street N.W. Washington, D.C. 20314-1000

Re: NOTICE OF INTENT TO SUE THE U.S. ARMY CORPS OF ENGINEERS AND LIEUTENANT GENERAL THOMAS P. BOSTICK UNDER THE CLEAN WATER ACT

Dear Lieutenant General Thomas P. Bostick:

This letter is to provide you with sixty days notice of Columbia Riverkeeper's ("Riverkeeper") intent to file a citizen suit against the United States Army Corps of Engineers and Lieutenant General Thomas P. Bostick in his official capacity as the Commanding General and Chief of Engineers of the United States Army Corps of Engineers (collectively, the "Corps") under section 505 of the Clean Water Act, 33 U.S.C. § 1365, for the violations described herein. The Clean Water Act prohibits any person from discharging any pollutant to waters of the United States except as authorized by a National Pollutant Discharge Elimination System ("NPDES") permit. Continuing to discharge a pollutant without securing an NPDES permit constitutes an ongoing violation of the Clean Water Act.

The Corps has and continues to violate section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), by discharging pollutants to waters of the United States and the States of Washington and Oregon from the following Columbia River and Snake River dams and their associated structures and facilities: Bonneville Dam, The Dalles Dam, John Day Dam, McNary Dam, Ice Harbor Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam (collectively, the "Dams"). Specifically, the Corps discharges oils (including transformer oil), greases, other lubricants, and cooling water from the Dams without the authorization of NPDES permits in violation of the Clean Water Act. <sup>2</sup>

Notice of Intent to Sue - 1

 $<sup>^1</sup>$  The term "Dam(s)," as used herein, includes the Dam(s) and all associated structures and facilities, including turbines, powerhouses, transformers, spillways, navigation lock systems, fish passage facilities, and cranes. Pursuant to 40 C.F.R. § 135.3(a), the approximate locations of the Dams are identified in Appendices 1-8.

<sup>&</sup>lt;sup>2</sup> As explained below, the Corps has obtained one NPDES permit for certain oil pollution discharges from one of the Dams. Specifically, the Corps is authorized by the Oregon

The Corps has a history of both acute spills and chronic leaks of pollutants into the Columbia River and Snake River, in addition to continuous and regular pollutant discharges. For example, in 2011 and 2012 the Corps reported discharging over 1,500 gallons of PCB-laden transformer oil at the Ice Harbor Dam on the Snake River. That oil contained PCBs at levels 14,000,000% greater than state and federal chronic water quality standards. According to the U.S. Environmental Protection Agency ("EPA"), PCBs cause cancer, as well as a variety of other adverse health effects on the immune system, reproductive system, nervous system, and endocrine system. The Corps' discharge of oil pollution from Ice Harbor Dam is not an isolated problem. As this notice of intent to sue explains, the Corps has a history of discharging oil and other pollution from the Dams without NPDES permits.

This notice of intent to sue is part of Riverkeeper's effort to protect people who rely on the Columbia and Snake Rivers for uses including drinking water, food, and recreation. Riverkeeper's mission is to protect and restore the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. The organization's strategy for protecting the Columbia River and its tributaries includes working in river communities and enforcing laws that protect public health, salmon, and other fish and wildlife.

#### I. Legal Background.

Oregon and Washington's rivers, and the use of rivers by people, fish, and wildlife, are protected by both federal and state law. In 1972, Congress passed the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The Clean Water Act is the cornerstone of surface water quality protection in the United States. In the forty years since its passage, the Act has dramatically increased the number of waterways that are once again safe for fishing and swimming. Despite the great progress in reducing water pollution, many of the Nation's waters still do not meet the water quality goals. In fact, the vast majority of rivers and streams in Washington and Oregon fail to meet basic state water quality standards for pollutants such as toxics and temperature. These standards are designed to protect designated uses, including aquatic life, fishing, swimming, and drinking water.

The NPDES permitting scheme is the primary means by which discharges of pollutants are controlled. At a minimum, NPDES permits must include technology-based

Department of Environmental Quality to discharge pollution from the oil water separator at Powerhouse 1 at the Bonneville Dam under NPDES Permit No. 102768, EPA Reference No. OR003435-5. The Corps has secured NPDES permits for certain sewage wastewater discharges; such discharges are not the subject of this notice letter. *See* NPDES Permit EPA Reference Nos. OR0022624, WA0026701, WA0022110, and WA0022101.

<sup>&</sup>lt;sup>3</sup> U.S. EPA, *Basic Information: Polychlorinated Biphenols*, http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/about.htm.

<sup>&</sup>lt;sup>4</sup> See State of Washington 303(d) List, http://www.ecy.wa.gov/programs/wq/303d/index.html; State of Oregon 303(d) List, http://www.deg.state.or.us/wg/assessment/assessment.htm.

effluent limitations, any more stringent limitations necessary to meet water quality standards, and monitoring and reporting requirements. *See* 33 U.S.C. §§ 1311, 1342, 1318. Every year, EPA and the states of Oregon and Washington issue hundreds of permits for pollution discharges into the Columbia and Snake Rivers. These include permits that regulate the discharge of toxic pollution, hot water, bacteria, and other pollutants. According to EPA, improvements to the quality of water in our rivers are directly linked to the implementation of the NPDES program and the control of pollutants discharged from both municipal and industrial point sources.<sup>5</sup>

#### II. The Heavy Toll of Pollution on the Columbia and Snake Rivers.

The Columbia and Snake Rivers are two of the West's great river systems. These rivers support rich fishing traditions, provide water for communities and agriculture, recreation opportunities, and power for hydroelectric dams. The rivers are also severely degraded by pollution. Toxic pollution threatens the health of people that eat local fish and jeopardizes the public's right to eat fish caught locally. Rising water temperatures also threaten the health of salmon and other aquatic life that rely on cool water for survival.

In 2006 EPA designated the Columbia River Basin, which includes the Snake River, a Critical Large Aquatic Ecosystem because toxic contamination and other pollution are so severe. In 2009 EPA released an in-depth report on toxic pollution in the Columbia, the *Columbia River Basin: State of River Report for Toxics*. EPA's report concluded that harmful pollutants are moving up the food chain, impacting humans, fish, and wildlife. As the report explains, "[i]n 1992, an EPA national survey of contaminants in fish in the United States alerted EPA and others to a potential health threat to tribal and other people who eat fish from the Columbia River Basin." This survey prompted further study on the contaminated fish and the potential impacts on tribal members.

In particular, EPA funded four Columbia River tribes, through the Columbia River Intertribal Fish Commission ("CRITFC"), to study contaminant levels in fish caught at traditional fishing sites. The study demonstrated the presence of 92 toxic chemicals in fish consumed by tribal members, resulting in a 50-fold increase in cancer risk among tribal members whose diets rely on river-caught fish. Contaminants found in these fish include PCBs, dioxins, furans, arsenic, mercury, and DDE, a toxic breakdown product of DDT. 8

The CRITFC study is not alone in demonstrating the serious problem of toxic contamination. From 1989 to 1995, the Lower Columbia River Bi-State Water Quality Program ("Bi-State Program") generated substantial evidence demonstrating that water and

<sup>&</sup>lt;sup>5</sup> U.S. EPA, Water Permitting 101 at 11, http://www.epa.gov/npdes/pubs/101pape.pdf.

<sup>&</sup>lt;sup>6</sup> U.S. EPA, *Columbia River Basin State of River Report for Toxics* (hereafter *State of the River Report*) (January 2009), http://yosemite.epa.gov/r10/ecocomm.nsf/Columbia/SoRR/.

<sup>&</sup>lt;sup>7</sup>State of the River Report at 4.

<sup>&</sup>lt;sup>8</sup> *Id.* at 19.

sediment in the Lower Columbia River and its tributaries have levels of toxic contaminants that are harmful to fish and wildlife. The Bi-State Program concluded that:

- Dioxins and furans, metals, PCBs, PAHs, and pesticides impair the water sediment, and fish and wildlife:
- Arsenic, a human carcinogen, exceeded both EPA ambient water criteria for protection of human health and the EPA human health advisories for drinking water;
- Beneficial uses such as fishing, shellfishing, wildlife, and water sports are impaired;
- Many toxic contaminants are moving up the food chain and accumulating in the bodies of animals and humans that eat fish;
- People who eat fish from the lower Columbia over a long period of time are exposed to health risks from arsenic, PCBs, dioxins and furans, and DDT and its breakdown products.<sup>10</sup>

Other studies have confirmed and added to the overwhelming scientific evidence on toxic contamination in the Columbia River Basin. 11

Pollution discharges from the Corps' Dams contribute to the pollution crisis on the Columbia and Snake Rivers. According to the National Oceanic & Atmospheric Administration's ("NOAA"):

Spilled oil can harm living things because its chemical constituents are poisonous. This can affect organisms both from internal exposure to oil through ingestion or inhalation and from external exposure through skin and eye irritation. Oil can also smother some small species of fish or invertebrates and coat feathers and fur, reducing birds' and mammals' ability to maintain their body temperatures. <sup>12</sup>

The impacts of oil pollution are sobering. Yet the Corps discharges oil and other pollution from the Dams without the NPDES permit authorizations required by the Clean Water Act. In turn, the Corps fails to monitor and report pollution in a manner that enables the public to fully understand the extent and severity of the problem.

10 Id. at 5 - 6

<sup>11</sup> Id. at 6 (citing studies by USGS, the U.S. Army Corps of Engineers, DEQ, and others); see

generally U.S. EPA, State of the River Report.

<sup>&</sup>lt;sup>9</sup> Lower Columbia River Estuary Partnership. 2007. Lower Columbia River and Estuary Ecosystem Monitoring: Water Quality and Salmon Sampling Report at 1.

<sup>&</sup>lt;sup>10</sup> *Id.* at 5 - 6.

<sup>&</sup>lt;sup>12</sup> NOAA, Office of Response and Restoration, *How Oil Effects Fish and Wildlife in Marine Environments*, http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/how-oil-harms-animals-and-plants-marine-environments.html.

#### III. Unpermitted Pollutant Discharges Common to All of the Dams.

Section 301(a) of the Clean Water Act prohibits discharges of oils (including transformer oil), greases, lubricants, cooling water, and other pollutants to the Columbia and Snake Rivers from the Dams without NPDES permit authorization. 33 U.S.C. § 1311(a). Without NPDES permits, the Corps is failing to monitor, report, and reduce pollution discharges pursuant to the Clean Water Act and state and federal implementing rules.

The Dams utilize Kaplan turbines, which have variable pitch blades that can be adjusted to increase efficiency. The shaft and hubs of these turbines are filled with oil or another lubricant. This oil or lubricant leaks to surface waters from certain locations, including the turbine blade packing/seals, especially when the turbines are not properly maintained and/or operationally controlled. Available information indicates that the Corps has not properly maintained and/or operationally controlled the Kaplan turbines on the Dams in a manner to prevent or minimize discharges. Accordingly, based upon such information, the Corps is in violation of section 301(a) of the CWA by discharging oil or lubricant from each of the Kaplan turbines at the Dams each and every day for the past six years.

Wicket gates control the amount of water flowing through the turbines at the Dams. The wicket gate bearings are lubricated with grease or another lubricant. This grease or lubricant is continuously fed into the bearings and discharged into surface waters. The Corps is in violation of section 301(a) of the CWA by discharging grease or lubricant from the bearings at each of the turbine wicket gates at the Dams each and every day for the past six years.

The Dams discharge oils, greases, lubricants, and other pollutants collected from various sources through sumps, including powerhouse drainage sumps, un-watering sumps, spillway sumps, navigation lock sumps, and other systems. Of these pollutant discharges, only those from the oil water separator at Powerhouse 1 at the Bonneville Dam are authorized by a NPDES permit. The Corps is in violation of section 301(a) of the CWA by discharging pollutants from these various drainage and/or un-watering sumps and other systems at the Dams. These violations have occurred each and every time the Corps made these discharges in the past six years and continue to occur. Discharges from the oil water separator at Powerhouse 1 at the Bonneville Dam authorized by NPDES Permit No. 102768 are excluded from this assertion.

The Dams discharge cooling water, and the heat associated therewith, that has been used to cool a variety of Dam components and materials, including turbines, generators, transformers, and lubricating oils. The Corps is in violation of section 301(a) of the CWA by discharging cooling water, and the associated heat, from the Dams each and every day for the past six years.

The Corps appears to recognize that discharging oil, greases, lubricants, cooling water, and other pollution to the Columbia and Snake Rivers from a Dam requires a NPDES permit. For instance, the Corps discharges pollution from the oil water separator at Powerhouse 1 at the Bonneville Dam pursuant to an NPDES permit issued by the Oregon Department of

Environmental Quality. The Corps has not, however, applied for or obtained any NPDES permits for other sources of pollution discharges at the Bonneville Dam, including oil discharged to the Columbia River from the oil water separator at Power House 2. In 2008 the Corps submitted an application to EPA for an NPDES permit for 31 unpermitted wastewater discharge points to the Columbia River from The Dalles Dam. EPA has not issued an NPDES permit, yet the Corps continues to discharge oils, greases, lubricants, cooling water and other pollution from The Dalles Dam. The Corps has neither applied for nor obtained NPDES permits for oils, greases, lubricants, cooling water, and other pollution discharges from John Day Dam, McNary Dam, Ice Harbor Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam.

#### IV. Unpermitted Pollutant Discharges Specific to Each Dam.

#### A. The Bonneville Dam.

Appendix 1 to this letter is a table that provides information regarding spill and similar incidents reported at the Bonneville Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the Bonneville Dam as described in Appendix 1 to this letter.

#### B. The Dalles Dam.

Appendix 2 to this letter is a table that provides information regarding spill and similar incidents reported at The Dalles Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at The Dalles Dam as described in Appendix 2 to this letter.

#### C. The John Day Dam.

Appendix 3 to this letter is a table that provides information regarding spill and similar incidents reported at the John Day Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the John Day Dam as described in Appendix 3 to this letter.

#### D. The McNary Dam.

Appendix 4 to this letter is a table that provides information regarding spill and similar incidents reported at the McNary Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the McNary Dam as described in Appendix 4 to this letter.

 $<sup>^{13}</sup>$  Appendices 1-8 detail specific reports of pollution at the Dams. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Dams.

#### E. Ice Harbor Dam.

Appendix 5 to this letter is a table that provides information regarding spill and similar incidents reported at the Ice Harbor Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the Ice Harbor Dam as described in Appendix 5 to this letter.

#### F. Lower Monumental Dam.

Appendix 6 to this letter is a table that provides information regarding spill and similar incidents reported at the Lower Monumental Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the Lower Monumental Dam as described in Appendix 6 to this letter.

#### G. Little Goose Dam.

Appendix 7 to this letter is a table that provides information regarding spill and similar incidents reported at the Little Goose Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the Little Goose Dam as described in Appendix 7 to this letter.

#### H. Lower Granite Dam.

Appendix 8 to this letter is a table that provides information regarding spill and similar incidents reported at the Lower Granite Dam since May 22, 2007. The Corps has violated section 301(a) of the CWA by discharging pollutants at the Lower Granite Dam as described in Appendix 8 to this letter.

#### V. Party Giving Notice of Intent to Sue.

The full name, address, and telephone number of the party giving notice is:

Columbia Riverkeeper 111 Third St. Hood River, OR 97031 (541) 387-3030

#### VI. Attorneys Representing Riverkeeper.

The attorneys representing Riverkeeper in this matter are:

Brian A. Knutsen, Knoll Lowney, and Marc Zemel Smith & Lowney, PLLC 2317 East John Street Seattle, WA 98112 (206) 860-2883 Lauren Goldberg, Staff Attorney Columbia Riverkeeper 111 Third St. Hood River, OR 97031 (541) 965-0985

#### VII. Conclusion.

The violations described herein reflect those indicated by the information currently available to Riverkeeper. Riverkeeper intends to sue for all violations, including those yet to be uncovered and those committed after the date of this notice of intent to sue.

Riverkeeper intends to seek injunctive relief to prevent further violations under sections 505(a) and (d) of the CWA, 33 U.S.C. § 1365(a) and (d), and such other relief as is permitted by law. Columbia Riverkeeper further intends to seek recovery of its litigation expenses as authorized by section 505(d) of the CWA, 33 U.S.C. § 1365(d).

Riverkeeper believes that this notice of intent to sue sufficiently states grounds for filing suit. Riverkeeper intends to file one or more citizen suits against the United States Army Corps of Engineers and Lieutenant General Thomas P. Bostick in his official capacity as the Commanding General and Chief of Engineers of the United States Army Corps of Engineers under section 505(a) of the CWA, 33 U.S.C. § 1365(a), for violations at the expiration of the sixty-day notice period or shortly thereafter.

Riverkeeper is willing to discuss effective remedies for the violations addressed in this letter and appropriate settlement terms during the sixty-day notice period. Such discussions should be initiated within ten days of receipt of this letter if there is an interest in attempting to resolve this matter in the absence of litigation. Riverkeeper does not intend to delay the filing of one or more complaints if discussions are continuing when the notice period ends. Please direct all correspondence to Brian A. Knutsen at (971) 373-8692 or briank@igc.org.

Very truly yours,

SMITH & LOWNEY, PLLC

/Brian A. Knyatsen

c: Bob Perciasepe, Acting Administrator, EPA
Dennis McLerran, Regional Administrator, Region 10, EPA
Eric H. Holder, Jr., Attorney General of the United States
Maia D. Bellon, Director, Washington Department of Ecology
Dick Pedersen, Director, Oregon Department of Environmental Quality
Lauren Goldberg, Columbia Riverkeeper Staff Attorney

#### **APPENDIX 1**

#### **BONNEVILLE DAM**

Latitude: 45°38'39" N Longitude: 121°56'26" W

The following table summarizes pollution discharges from Bonneville Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Bonneville Dam.

| Reported  | Reported                          | Reported Cause  | Source of   | Reported  | Comments   |
|---|-----------------------------------|---|---|---|--|
| Date  | Pollutant                         |   | Report  | Amount  |  |
| March 12, 2013  | Mobile<br>634<br>Synthetic<br>Oil | Corps maintenance crews were lowering a Fish Screen into a Unit Head Gate Slot when they noticed an oil sheen; "they realized they forgot to plug the flood gate vent." | Emergency Response Tracking System (ERTS) 639836; National Response Center (NRC) Report No. 1040833 | 3 tbsp.   |  |
| Feb. 4,<br>2013 to (at<br>least)<br>March 11,<br>2013 | Oil                               | Power House 2 oil water separator; Corps engineers suspect that oil is emulsified and then passes through the oil water separator  Faulty relay in the                  | NRC Report<br>No. 1037516;<br>ERTS 639086   | Unknown;<br>sheen<br>observed<br>on<br>multiple<br>days<br>Unknown              | Believed to be part of an ongoing problem with the oil water separator; no repairs or other fixes have been made |
| 2012  | Oil                               | automatic grease system for the wicket gates on half of the turbine bank on Bonneville Powerhouse 2   | ER13 03/3/0   | sheen   |  |
| Jan. 9,<br>2012                                       | Hydraulic<br>Oil                  | Seal blew on Powerhouse 2, Unit 12 wicket gate; excess oil made it into oil water separator, which discharged oil   | ERTS 631395   | 7 tbs. to 1 gal; 2' x 6' sheen; 150 gal. lost to turbine pit, 50 made it to OWS | WA side; "Powerhouse 2 is discharging a non-recoverable small sheen every 2 to 3 minutes"                        |
| Sept. 13,<br>2011                                     |                                   | Powerhouse 2 oil water separator  | ERTS 629171   | sheen   | WA side; "slow leak of oily water from the oil water separator to the  |

|                   |                   | Case 2:13-cv-00282-LRS   | Document 1               | Filed 07/31/1   | l3<br>  Columbia River"   |
|-------------------|-------------------|--|--------------------------|---|---|
| Aug. 29,<br>2011  | Turbine<br>Oil    | Powerhouse 2 oil water separator   | ERTS 628858              | Apprx. 1<br>tsp., sheen<br>appears<br>every 15<br>minutes | WA side; Crew spotted sheen 4 or 5 times after initial notice; "There have been sheen issues in the past at this tailrace"  |
| Aug. 2,<br>2011   | Lube Oil          | Gantry Crane at Powerhouse 1 blew lube connection between filter and motor   | ERTS 628342              | 15 gal.<br>(maybe<br>only 4<br>drops in<br>water)         | OR side   |
| Nov. 9,<br>2010   | Lube Oil          | Fore bay surrounding tube  | ERTS 623397              | < 5 gal.  | OR side   |
| Aug. 31,<br>2010  | Turbine<br>Oil    | Powerhouse 2, Unit 17  | ERTS 622074              | 8,000 gal.<br>in OWS,<br>sheen seen<br>in river           |   |
| June 7,<br>2010   | Hydraulic<br>Oil  | Navigation Lock #1 lower gate; serving old navigation locks                  | ERTS 620362              | 1.5 gal.  | OR side   |
| March 2,<br>2010  | Hydraulic<br>oil  | Hydraulic line on crane<br>between Bonneville 11 and<br>spillway blew        |                          | 2 – 4<br>quarts   |   |
| Feb. 16,<br>2010  | oil               | Bay 4 Powerhouse,<br>dumpster leaked gear lube                               | ERTS 618150              | 15' x 20'<br>sheen  | OR side   |
| Jan. 15,<br>2010  | Oil               | Powerhouse 2, stormdrain, possibly from crane                                | ERTS 617760              | < 1 pint  | WA side (Bonneville<br>Powerhouse 2); cause<br>unknown  |
| Dec. 21,<br>2009  | Oil               | Contractor removing piping; either residual oil from piping or leak from saw | ERTS 617159              | 5' x 20'<br>sheen   |   |
| Sept. 25,<br>2009 | Grease / lube oil | Navigation Lock 2 / Gates 3 and 4  | ERTS 615565              | 60' x 6'<br>sheen   | Gates have automated grease system to lube bearings   |
| May 27,<br>2008   | Motor oil         | Spillway gate hoist bay 15 damaged, leaked                                   | ERTS 606012              | 2' x 1.5' sheen   |   |
| Dec. 14,<br>2007  | Oil               | Bonneville 2 fish ladder,<br>seal failed in pump in fish<br>ladder system    | ERTS 602704              | < 1 gal.  | WA side (Bonneville 2)  |
| July 9,<br>2007   | Governor<br>Oil   |  | NRC Report<br>No. 841552 | 315 gal.  | "potential release of 315 gal. of governor oil into the Columbia River. They have been putting in more oil than they would normally use in one of the hydraulic units, so they think they have a leak somewhere." |

#### **APPENDIX 2**

#### THE DALLES DAM

Latitude: 45°36'51" N Longitude: 121°08'03" W

The following table summarizes pollution discharges from The Dalles Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by The Dalles Dam.

| Reported         | Reported                        | Reported Cause  | Source of Report                          | Reported   | Comments                 |
|------------------|---------------------------------|---|---|--|--------------------------|
| Date             | Pollutant                       |   |   | Amount   |                          |
| Feb. 5, 2013     | Hydraulic<br>Oil                | Downed unit due to<br>annual overhaul<br>was restarted and<br>released oil into the<br>river from Main<br>Unit #8 | NRC Report No.<br>1037655; ERTS<br>639123 |  |                          |
| Dec. 6,<br>2012  | Hydraulic<br>Oil                | Broken hydraulic line caused a discharge of approximately .5 pints of hydraulic fluid into the river              | NRC Report No.<br>1032489; ERTS<br>638032 | .5 pints   |                          |
| Feb. 21,<br>2012 | Hydraulic<br>Oil                | Sheen seen during startup of Main Unit 11   | ERTS 632251                               | 0.75 quart   |                          |
| Dec. 14, 2011    | Hydraulic<br>Oil                | Spill from Main Unit 10 of 2 quarts of hydraulic oil that went into the water of the Columbia River               | NRC Report No. 998084                     | 2 quarts   |                          |
| May 25,<br>2010  | Hydraulic<br>Oil                | Release of oil<br>during startup of<br>Main Unit 21   | ERTS 620118                               |  |                          |
| Jan. 15,<br>2010 | Hydraulic<br>Oil                | Release from Main<br>Unit 20; equipment<br>failure  | ERTS 617585                               | < 1 gal.   |                          |
| Dec. 23, 2009    | Transformer<br>Oil (w/<br>PCBs) | Out of use transformer left sitting on ground, cold weather snapped fitting                                       | ERTS 617209; and others                   | gal. spilled to soil, unknown amount percolated to | Ecology<br>Investigation |

|                   |                  |                            |             | river; large<br>sheen<br>observed |   |
|-------------------|------------------|----------------------------|-------------|-----------------------------------|---|
| Nov. 14,<br>2007  | Oil              | Main Unit 5                | ERTS 601983 | 1 gal.                            | "This spill is part of an ongoing, occasional event at the Dalles where the source is unknown."               |
| Sept. 26, 2007    | Turbine Oil      | Drainage sump              | ERTS 601058 | 1 gal.                            |   |
| Sept. 21,<br>2007 | Hydraulic<br>Oil | Drainage sump<br>discharge | ERTS 600892 | 0.5 gal.                          | "Part of an ongoing series of events being tracked in ERTS. Source is unknown, similar to Sept. 4 2007 event" |
| Aug. 23,<br>2007  | Hydraulic<br>Oil | Turbine                    | ERTS 600283 |                                   |   |

#### **APPENDIX 3**

#### **JOHN DAY DAM**

Latitude: 45°42'59" N Longitude: 120°41'37" W

The following table summarizes pollution discharges from the John Day Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the John Day Dam.

| Reported | Reported    | Reported Cause               | Source of    | Reported  | Comments           |
|----------|-------------|------------------------------|--------------|-----------|--------------------|
| Date     | Pollutant   |                              | Report       | Amount    |                    |
| April 9, | Oil         | Drainage pump released an    | NRC Report   | Unknown   |                    |
| 2013     |             | unknown amount of an         | No. 1043457  |           |                    |
|          |             | unknown oil to the           |              |           |                    |
|          |             | Columbia River while         |              |           |                    |
|          |             | starting up.                 |              |           |                    |
| Oct. 27, | Turbine Oil | Sheen discovered             | NRC Report   | unknown   |                    |
| 2012     |             | downstream of the dam; 30    | No. 1028508; |           |                    |
|          |             | gallons of turbine oil       | ERTS 637239  |           |                    |
|          |             | missing from Main Unit 3     |              |           |                    |
|          |             | (generating unit) from       |              |           |                    |
|          |             | unknown causes               |              |           |                    |
| Apr. 19, | Hydraulic   | "28 gallons of hydraulic oil | NRC Report   | 28        |                    |
| 2012     | Oil         | discharge from fish pump     | No. 1009151  | gallons   |                    |
|          |             | #3."                         |              |           |                    |
| Jan. 17, | Turbine Oil | "Caller stated that an oil   | NRC Report   | 30        |                    |
| 2012     |             | sheen was discovered in      | No. 100613   | gallons   |                    |
|          |             | the main unit 3A gate slot   |              |           |                    |
|          |             | possibly from STS gear       |              |           |                    |
|          |             | slot."                       |              |           |                    |
| Dec. 30, | Oil         | Unknown; ERTS report         | ERTS 631210  | 800 ft. x |                    |
| 2011     |             | states that Corps            |              | 800 ft.   |                    |
|          |             | determined this was          |              | sheen     |                    |
|          |             | distinct from oil leaks      |              |           |                    |
|          | - 1: 0''    | reported in ERTS 631027      | NID C D      |           | G1                 |
| Dec. 19, | Turbine Oil | Corps reported 12.5          | NRC Report   | Unknown   | Sheen initially    |
| 2011 –   |             | gallons of turbine oil lost  | No. 998524;  |           | reported on Dec.   |
| Dec. 30, |             | from Unit 1; sheen noted in  | ERTS 631027  |           | 19, 2011; ERTS     |
| 2011     |             | tailrace of project          |              |           | Report No. 631027  |
|          |             |                              |              |           | reports spill      |
|          |             |                              |              |           | ongoing as of Dec. |
|          |             |                              |              |           | 30, 2011           |

| Oct. 11,<br>2011  | DTE<br>Mobile<br>Heavy<br>(turbine) | Release of 200 gallons of<br>turbine oil to the Columbia<br>River from Main Unit #6<br>generator due to<br>mechanical failure; leak<br>suspected from blade seal<br>failure                                | Spill Prevention, Control and Countermeasure Plan (SPCC), Appx. E; ERTS 629710 | 200 gal.  | Kaplan low oil<br>alarm on MU<br>(Main Unit) 6                        |
|-------------------|-------------------------------------|--|--|-----------|---|
| Sept. 21,<br>2011 | Transformer<br>Oil                  | "Drain plug failure on cooler for T-3B. Electricians were draining the oil from the cooler when the plug failed."  | SPCC Appx. E   | 3 gal.    | Unclear if reached the river  |
| Aug. 9,<br>2011   | Oil                                 | Unknown  | SPCC Appx. E   | < 1 cup   | "minor spill in gate slot 16-A and 16-B."                             |
| July 17,<br>2011  | Turbine Oil                         | "Oil cooler on MU #4 sprung a leak releasing ~25 gal. onto the turbine pit area."  | SPCC Appx. E   | 25 gal.   | Unclear if reached the river  |
| July 11,<br>2011  | Oil                                 | Gate slot 7-C had a sheen due to faulty seal on fish screen gear box   | SPCC Appx. E   | < 1 pint  |   |
| June 3,<br>2011   | Turbine Oil                         | "MU #15 the pumps used<br>to remove gland water<br>were not turned on causing<br>the turbine pit to flood with<br>water. The water displaced<br>the oil in the governor<br>reservoir."                     | SPCC Appx. E   | ~ 25 gal. | Unclear if reached the river  |
| Jan. 27,<br>2011  |                                     |  | SPCC Appx. E   | < 1 pint  | "sheen discovered in AWS discharge conduit near the butterfly valve." |
| Dec. 2,<br>2010   | Turbine Oil                         | "MU #12 blade seals<br>leaking into draft tube."   | SPCC Appx. E   | ~100 gal. | Unclear if reached river  |
| Oct. 12,<br>2010  | Turbine Oil                         | "MU # 11 has a pump in<br>turbine pit to pump out<br>water seepage. The pump<br>was not working, causing<br>water to accumulate in the<br>turbine plate displacing oil<br>out of the turbine oil<br>sump." | SPCC Appx. E   | ~75 gal.  | Unclear if reached river  |
| May 20,<br>2010   | Turbine Oil                         | Turbine 12; cause unknown  | ERTS 620026<br>and SPCC<br>Appx. E   | 200 gal.  | Low oil alarm sounded – 200 gal. missing from                         |

|                   |                    |   |                                    |          | turbine since inspection 1 week prior; no sheen seen in river but sheen seen in turbine pit |
|-------------------|--------------------|---|------------------------------------|----------|---|
| Feb. 25,<br>2010  | Hydraulic<br>fluid | "spillway gate heater north<br>oil line on bay 8 was put in<br>operational mode. Oil<br>leaked out of access/clean<br>out point."                                       | SPCC Appx. E                       | < 1 gal. |   |
| Oct. 8,<br>2009   | Turbine Oil        | "MU #12 was put back<br>into service after a 5-year<br>overhaul. A small sheen<br>developed upon startup but<br>quickly dissipated.                                     |                                    | < 1 cup  |   |
| Feb. 28,<br>2009  | Motor Oil          | Navigation Lock gate oil<br>heater leak – equipment<br>failure  | ERTS 611364<br>and SPCC<br>Appx. E | 10 gal.  |   |
| Feb. 12,<br>2009  | Turbine Oil        | Start up of Main Unit 10 after being down for repairs   | ERTS 611070<br>and SPCC<br>Appx. E | 1 gal.   |   |
| April 10,<br>2008 | Unknown            | "An oil sheen appeared in MU #10 gate slots.  Maintenance concluded that it was left over oil residue from when Unit was taken out of service for its 6 year overhaul." | SPCC Appx. E                       | Unknown  |   |
| Aug. 20,<br>2007  | Oil                | "An oil sheen appeared in MU #9 gate slots. Assumption as that it was coming from the drive motor on the STS screen."   | SPCC Appx. E                       | < 1 gal. |   |

### McNARY DAM

Latitude: 45°56'08" N Longitude: 119°17'53" W

The following table summarizes pollution discharges from the McNary Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the McNary Dam.

| Reported  | Reported       | Reported Cause          | Source of       | Reported     | Comments         |
|-----------|----------------|-------------------------|-----------------|--------------|------------------|
| Date      | Pollutant      |                         | Report          | Amount       |                  |
| Sept. 18, | Lube oil       | "caller reported that a | NRC Report      |              |                  |
| 2012      |                | miter gate discharged   | No. 1024819     |              |                  |
|           |                | a drop of miter oil."   |                 |              |                  |
| July 19,  | Unknown        | "the sump"              | NRC Report      |              |                  |
| 2012      | sheen          |                         | No. 1018266     |              |                  |
| Feb. 21,  | Either         | Unit 1 started after a  | ERTS 632248     | 10' x 10'    |                  |
| 2012      | assembly/gear  | rebuild                 |                 | sheen        |                  |
|           | oil or turbine |                         |                 |              |                  |
|           | oil            |                         |                 |              |                  |
| Nov. 23,  | Oil            | Crane on dam            | ERTS 630571,    | 4 drops of   | "McNary crew     |
| 2011      |                | dropped grease          | U.S. Army       | grease       | was removing     |
|           |                |                         | Corps of        |              | gear boxes on    |
|           |                |                         | Engineers After |              | crane #5";       |
|           |                |                         | Action Report,  |              | Crane used for   |
|           |                |                         | and Spill       |              | trash collection |
|           |                |                         | Prevention,     |              | and hangs over   |
|           |                |                         | Control, and    |              | water            |
|           |                |                         | Countermeasure  |              |                  |
|           |                |                         | Plan (SPCC)     |              |                  |
| May 12,   | Turbine Oil    | Cracked sight glass     | U.S. Army       | 430 gal.     |                  |
| 2011      |                | on unit # 6 that        | Corps of        | lost from    |                  |
|           |                | released oil to turbine | Engineers After | unit, < 10   |                  |
|           |                | pit and to a drainage   | Action Report   | gal. to      |                  |
|           |                | sump. The drainage      | and SPCC        | river; sheen |                  |
|           |                | sump accessible from    |                 | observed     |                  |
|           |                | dam elevation 264       |                 |              |                  |
|           |                | discharges into the     |                 |              |                  |
|           |                | tailrace of the         |                 |              |                  |
|           |                | Columbia River          | TIP TIC COLLEGE |              |                  |
| Dec. 21,  | Gear grease    | Grease was being        | ERTS 624152,    | 2 drops      | "during cleanup  |

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| March 30, 2010   | Grease      | cleaned off of gears during cleanup work due to a lock outage, and grease dropped  Dislodged piece of grease fell into river upstream of the | SPCC, and U.S.<br>Army Corps of<br>Engineeres<br>After Action<br>Report<br>SPCC        |          | of excess grease<br>from upstream<br>miter gate"; at<br>Navlock  |
|------------------|-------------|--|--|----------|--|
|                  |             | upstream miter gate  |  |          |  |
| Jan. 31,<br>2010 | Unknown     | Unknown  | U.S. Army Corps of Engineers After Action Report                                       | Unknown  | Sporadic Oil<br>sheens appeared<br>in fore bay river<br>side slots   |
| Feb. 23, 2009    | Unknown oil | Oil discharged while changing piping on drainage sump; oil sucked into sump when water in sump got low                                       | ERTS 611216,<br>U.S. Army<br>Corps of<br>Engineers After<br>Action Report,<br>and SPCC | < 1 gal. | "An oil/water separation system project is on the agenda for McNary and is a potential remedy for this problem."; sheen observed after discharge pump 4 was started, source of sheen is discharge sump |

## **ICE HARBOR DAM**

Latitude: 46°14'58" N Longitude: 118°52'47" W

The following table summarizes pollution discharges from Ice Harbor Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by Ice Harbor Dam.

| Reported | Reported    | Reported Cause           | Source of    | Reported      | Comments          |
|----------|-------------|--------------------------|--------------|---------------|-------------------|
| Date     | Pollutant   |                          | Report       | Amount        |                   |
| April 2, | Lube        | "believed to be caused   | ERTS 640360  | 4 ft. x 4 ft. |                   |
| 2013     | Oil/Motor   | from fresh grease on the |              | sheen         |                   |
|          | Oil         | lock cables"             |              |               |                   |
| March    | Lube        | Release of turbine oil   | ERTS         | 1 gallon      |                   |
| 29, 2013 | Oil/Motor   | during startup           | 640280; NCR  |               |                   |
|          | Oil         |                          | Report No.   |               |                   |
|          |             |                          | 1042442      |               |                   |
| March 8, | Oil         | "Cleaning some seals     | NRC Report   | 1 gallon      |                   |
| 2013     |             | and some residual oil    | No. 1040474  |               |                   |
|          |             | from an old system got   |              |               |                   |
|          |             | into the water."         |              |               |                   |
| Nov. 17, | Turbine Oil | "A turbine generator     | NRC Report   | 100' x 100'   |                   |
| 2012     |             | unit discharged turbine  | No. 103931;  | sheen         |                   |
|          |             | oil."                    | ERTS 63736   |               |                   |
| Oct. 25, | Hydraulic   | Hydraulic oil            | NRC Report   | 1 cup         | Call reported a   |
| 2012     | Oil         | discharged from turbine  | No. 1028316  |               | sheen             |
|          |             | bay due to the main unit |              |               |                   |
|          |             | being down               |              |               |                   |
| June 7,  | Lubricating | "unwatering pump"        | NRC Report   | 1 gal.; sheen |                   |
| 2012     | Oil         | discharging residual oil | No. 1013872; | 30' x 30'     |                   |
|          |             | in the pit"              | ERTS 634361  |               |                   |
| March 13 | Turbine oil | Discharge during         | Various,     | 5 - 10 gal.   | Unit 3 has a      |
| -14,     |             | maintenance – starting   | including    |               | known leak of     |
| 2012     |             | Unit 3 after transformer | NRC Report   | (up to 40     | about 1 gal / day |
|          |             | cooler repairs and 30    | No. 1005753  | gal.)         |                   |
|          |             | day shutdown             |              |               |                   |
| Feb. 27, | Transformer | Leak during transfer     | Various      | 44 gal.       | Generator Main    |
| 2012     | oil         |                          | including    |               | Unit 3; or TW-2   |
|          |             |                          | NRC Report   |               |                   |
|          |             |                          | No. 1004109  |               |                   |
| Feb. 22, | Oil         | Inadvertent tripping of  |              |               |                   |
| 2012     |             | a breaker that supplies  |              |               |                   |

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|            |               | an oil trailer – TW-2     |               |           |                  |
|------------|---------------|---------------------------|---------------|-----------|------------------|
| Sometime   | Transformer   | Leaks in metal tubing     | Email / press | Estimated | From T-1         |
| after June | oil (w/       |                           | release       | 1680 gal. | transformer heat |
| 2011 to    | PCBs)         |                           |               |           | exchange         |
| Jan. 2012  |               |                           |               |           |                  |
|            |               |                           |               |           |                  |
| Nov. 10,   | "Oil"         | Crack in turbine blades   |               |           |                  |
| 2010       |               | – Main Unit #4            |               |           |                  |
| Oct. 19,   |               | Packing gland leaks at    |               |           |                  |
| 2010       |               | three blades – oil leaked |               |           |                  |
|            |               | at hub/blade interface    |               |           |                  |
|            |               | requiring re-packing      |               |           |                  |
| Nov.       | R&O 32        | Tainter valve # 2 leaked  |               | ~ 5 gal.  |                  |
| 2008       |               | due to cracked weld in    |               |           |                  |
|            |               | flange                    |               |           |                  |
| Oct. 17 -  | DTE 30W       | Unit 1 turbine guide      |               | < 5 gal.  |                  |
| 18, 2008   | turbine oil   | bearing was overfilled    |               | _         |                  |
| Nov. (28)  | Turbine oil   | Unit 3 started up after   |               | < 10 gal. |                  |
| 2007       |               | sitting for 1 month       |               |           |                  |
| Sept. 10,  | Turbine oil   | Discharge when start up   |               |           |                  |
| 2007       |               | after being shut down     |               |           |                  |
|            |               | for repairs               |               |           |                  |
| Aug.       | R&O 32        | Leak from intake gate     |               | sheen     |                  |
| 2007       | hydraulic oil | hydraulic cylinder        |               |           |                  |

## **LOWER MONUMENTAL DAM**

Latitude: 46°33'46" N Longitude: 118°32'18" W

The following table summarizes pollution discharges from Lower Monumental Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Lower Monumental Dam.

| Reported         | Reported           | Reported Cause   | Source of Report                          | Reported                                   | Comments                            |
|------------------|--------------------|--|---|--|-------------------------------------|
| Date             | Pollutant          |  |   | Amount                                     |                                     |
| Aug. 9,<br>2012  | Turbine Oil        | "Oil entered the sump of Unit 2. This was caused by high water level in the unit. The sump pump pumped some of the oil into the river."  | NRC Report No.<br>1020559; ERTS<br>635725 | 3 gallons                                  |                                     |
| Feb. 13,<br>2012 | Unknown<br>oil     | Believed to be pump that had a leak  | NRC Report No.<br>1002882                 |  |                                     |
| March 25, 2010   | Veg. Oil           | "working on a crane which<br>leaked 5 gallons of food grade<br>vegetable oil onto ground. An<br>unknown amount went into a<br>storm drain which flowed into<br>the snake river creating a sheen" | NRC Report No. 935101                     | 5 gal.                                     |                                     |
| May 4,<br>2009   | Hydraulic<br>oil   | Release of oil to river from startup of Unit 2   | ERTS 612578                               |  | 20 by 100<br>foot sheen<br>observed |
| March 11, 2009   | oil                | Started Unit 1 after being shutdown since Dec.   | Email in DOE files                        |  |                                     |
| July 28,<br>2008 | Hydraulic<br>fluid | Oil released into river upon startup of Unit 1   | ERTS 607295 and NRC Report No. 878702     | 1 pint                                     |                                     |
| Jan. 22,<br>2008 | Hydraulic<br>oil   | "Hydraulic oil released from the<br>generator unit 1 due to<br>mechanical failure of a transfer<br>onto ground and water"  | NRC Report No. 860303                     | 300 gal.<br>total, 150<br>gal. to<br>water |                                     |
| Dec. 14, 2007    | Hydraulic oil      | Release from gate sill heater due to a piping leak   | NRC Report No. 857409                     | 1 gal.                                     |                                     |

## LITTLE GOOSE DAM

Latitude: 46°35'05" N Longitude: 118°01'38" W

The following table summarizes pollution discharges from Little Goose Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by Little Goose Dam.

| Reported       | Reported     | Reported Cause                    | Source of             | Reported   | Comments   |
|----------------|--------------|-----------------------------------|-----------------------|------------|--|
| Date           | Pollutant    |                                   | Report                | Amount     |  |
| Feb. 19,       | Turbine Oil  | Two 4 x 4 feet sheens             | ERTS 639378;          | unknown    |  |
| 2013           |              | believed to be from               | NRC Report No.        |            |  |
|                |              | Unit 1                            | 1038863               |            |  |
| Jan. 2,        | Turbine Oil  | While filling the                 | ERTS 638456;          | 1 quart    |  |
| 2013           |              | bearing housing an                | NRC Report No.        |            |  |
|                |              | estimated quart of oil            | 1034628               |            |  |
|                |              | was forced out of the             |                       |            |  |
|                |              | sump and then                     |                       |            |  |
|                |              | discharged to the river,          |                       |            |  |
|                |              | causing a sheen                   | 115.65                |            |  |
| March 25, 2010 | Diesel       | Unknown                           | NRC Report No. 935069 | 5 gal.     | "release of diesel oil<br>from an unknown<br>source coming out of<br>the bottom of spill bay<br>#2 due to an unknown<br>cause. |
| Oct. 20 or     | Lube / motor | Mechanical failure of             | ERTS 601516           | "worst     | ½ mile sheen   |
| 21, 2007       | oil          | Generator 6                       | and NRC Report        | case" est. |  |
|                |              |                                   | No. 852245            | is 120 to  |  |
|                |              |                                   |                       | 150 gal.   |  |
| Sept. 26, 2007 | Turbine Oil  | Equipment failure on turbine seal | NRC Report No. 849957 | 1 quart    |  |

### **LOWER GRANITE DAM**

Latitude: 46°39'33" N Longitude: 117°25'47" W

The following table summarizes pollution discharges from Lower Granite Dam reported in the Washington Department of Ecology's Emergency Response Tracking System and/or the U.S. Coast Guard's National Response Center database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Lower Granite Dam.

| Reported<br>Date | Reported<br>Pollutant | Reported Cause        | Source of Report      | Reported<br>Amount | Comments |
|------------------|-----------------------|-----------------------|-----------------------|--------------------|----------|
| Jan. 2,          | Turbine Oil           | "lower guide bearing  | NRC Report No.        | 1 quart            |          |
| 2013             |                       | of the turbine unit." | 1034628               |                    |          |
| Dec. 4,          | Oil                   | Source unknown        | ERTS 637966           | 200' x 200'        |          |
| 2012             |                       |                       |                       | feet sheen         |          |
| March            | Hydraulic             | "human error" –       | Email in Washington   | 80 to 90           |          |
| 13, 2011         | fluid                 | operator overfilled a | Department of Ecology | gal.               |          |
|                  |                       | bearing in a turbine  | files                 | _                  |          |

### THE DALLES DAM

Latitude: 45°36'51" N Longitude: 121°08'03" W

The following table summarizes pollution discharges from The Dalles Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by The Dalles Dam.

| Reported         | Reported                        | Reported Cause  | Source of Report                          | Reported   | Comments                 |
|------------------|---------------------------------|---|---|--|--------------------------|
| Date             | Pollutant                       |   |   | Amount   |                          |
| Feb. 5, 2013     | Hydraulic<br>Oil                | Downed unit due to<br>annual overhaul<br>was restarted and<br>released oil into the<br>river from Main<br>Unit #8 | NRC Report No.<br>1037655; ERTS<br>639123 |  |                          |
| Dec. 6,<br>2012  | Hydraulic<br>Oil                | Broken hydraulic line caused a discharge of approximately .5 pints of hydraulic fluid into the river              | NRC Report No.<br>1032489; ERTS<br>638032 | .5 pints   |                          |
| Feb. 21,<br>2012 | Hydraulic<br>Oil                | Sheen seen during<br>startup of Main<br>Unit 11   | ERTS 632251                               | 0.75 quart   |                          |
| Dec. 14, 2011    | Hydraulic<br>Oil                | Spill from Main Unit 10 of 2 quarts of hydraulic oil that went into the water of the Columbia River               | NRC Report No. 998084                     | 2 quarts   |                          |
| May 25,<br>2010  | Hydraulic<br>Oil                | Release of oil<br>during startup of<br>Main Unit 21   | ERTS 620118                               |  |                          |
| Jan. 15,<br>2010 | Hydraulic<br>Oil                | Release from Main<br>Unit 20; equipment<br>failure  | ERTS 617585                               | < 1 gal.   |                          |
| Dec. 23, 2009    | Transformer<br>Oil (w/<br>PCBs) | Out of use<br>transformer left<br>sitting on ground,<br>cold weather<br>snapped fitting                           | ERTS 617209; and others                   | gal. spilled to<br>soil, unknown<br>amount<br>percolated to<br>river; large<br>sheen | Ecology<br>Investigation |

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|                   |                  |                         |             | observed |   |
|-------------------|------------------|-------------------------|-------------|----------|---|
| Nov. 14,<br>2007  | Oil              | Main Unit 5             | ERTS 601983 | 1 gal.   | "This spill is part of<br>an ongoing,<br>occasional event at<br>the Dalles where the<br>source is unknown."   |
| Sept. 26,<br>2007 | Turbine Oil      | Drainage sump           | ERTS 601058 | 1 gal.   |   |
| Sept. 21,<br>2007 | Hydraulic<br>Oil | Drainage sump discharge | ERTS 600892 | 0.5 gal. | "Part of an ongoing series of events being tracked in ERTS. Source is unknown, similar to Sept. 4 2007 event" |
| Aug. 23,<br>2007  | Hydraulic<br>Oil | Turbine                 | ERTS 600283 |          |   |

## **JOHN DAY DAM**

Latitude: 45°42'59" N Longitude: 120°41'37" W

The following table summarizes pollution discharges from the John Day Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the John Day Dam.

| Reported         | Reported         | Reported Cause  | Source of                                 | Reported                           | Comments                               |
|------------------|------------------|---|---|------------------------------------|--|
| Date             | Pollutant        |   | Report                                    | Amount                             |  |
| June 25,<br>2013 | Unknown<br>Oil   | Believed to be an equipment failure associated with a leaking gear box on a fish screen   | NRC Report<br>No. 1051654                 | 0.25 cups                          | White/gray sheen observed, 3 ft x 4 ft |
| May 24,<br>2013  | Unknown<br>Oil   | Believed to be a discharge from fish screens in a gate slot   | NRC Report<br>No. 1048197                 | 1 pint                             |  |
| May 22,<br>2013  | Unknown<br>Oil   |   | NRC Report<br>No. 1047995                 | 50 ft x 20<br>ft sheen<br>reported |  |
| April 9,<br>2013 | Oil              | Drainage pump released an unknown amount of an unknown oil to the Columbia River while starting up.   | NRC Report<br>No. 1043457                 | Unknown                            |  |
| Oct. 27,<br>2012 | Turbine Oil      | Sheen discovered<br>downstream of the dam; 30<br>gallons of turbine oil<br>missing from Main Unit 3<br>(generating unit) from<br>unknown causes | NRC Report<br>No. 1028508;<br>ERTS 637239 | unknown                            |  |
| Apr. 19,<br>2012 | Hydraulic<br>Oil | "28 gallons of hydraulic oil discharge from fish pump #3."  | NRC Report<br>No. 1009151                 | 28<br>gallons                      |  |
| Jan. 17,<br>2012 | Turbine Oil      | "Caller stated that an oil<br>sheen was discovered in<br>the main unit 3A gate slot<br>possibly from STS gear<br>slot."                         | NRC Report<br>No. 100613                  | 30<br>gallons                      |  |
| Dec. 30,<br>2011 | Oil              | Unknown; ERTS report<br>states that Corps<br>determined this was<br>distinct from oil leaks   | ERTS 631210                               | 800 ft. x<br>800 ft.<br>sheen      |  |

|  |                                     | reported in ERTS 631027  |  |           |   |
|--|-------------------------------------|--|--|-----------|---|
| Dec. 19,<br>2011 –<br>Dec. 30,<br>2011 | Turbine Oil                         | Corps reported 12.5<br>gallons of turbine oil lost<br>from Unit 1; sheen noted in<br>tailrace of project   | NRC Report<br>No. 998524;<br>ERTS 631027                                       | Unknown   | Sheen initially reported on Dec. 19, 2011; ERTS Report No. 631027 reports spill ongoing as of Dec. 30, 2011 |
| Oct. 11,<br>2011                       | DTE<br>Mobile<br>Heavy<br>(turbine) | Release of 200 gallons of turbine oil to the Columbia River from Main Unit #6 generator due to mechanical failure; leak suspected from blade seal failure            | Spill Prevention, Control and Countermeasure Plan (SPCC), Appx. E; ERTS 629710 | 200 gal.  | Kaplan low oil<br>alarm on MU<br>(Main Unit) 6  |
| Sept. 21,<br>2011                      | Transformer<br>Oil                  | "Drain plug failure on cooler for T-3B. Electricians were draining the oil from the cooler when the plug failed."  | SPCC Appx. E   | 3 gal.    | Unclear if reached the river  |
| Aug. 9,<br>2011                        | Oil                                 | Unknown  | SPCC Appx. E   | < 1 cup   | "minor spill in gate slot 16-A and 16-B."   |
| July 17,<br>2011                       | Turbine Oil                         | "Oil cooler on MU #4 sprung a leak releasing ~25 gal. onto the turbine pit area."  | SPCC Appx. E   | 25 gal.   | Unclear if reached the river  |
| July 11,<br>2011                       | Oil                                 | Gate slot 7-C had a sheen<br>due to faulty seal on fish<br>screen gear box   | SPCC Appx. E   | < 1 pint  |   |
| June 3,<br>2011                        | Turbine Oil                         | "MU #15 the pumps used to remove gland water were not turned on causing the turbine pit to flood with water. The water displaced the oil in the governor reservoir." | SPCC Appx. E   | ~ 25 gal. | Unclear if reached the river  |
| Jan. 27,<br>2011                       |                                     |  | SPCC Appx. E   | < 1 pint  | "sheen discovered in AWS discharge conduit near the butterfly valve."                                       |
| Dec. 2,<br>2010                        | Turbine Oil                         | "MU #12 blade seals<br>leaking into draft tube."   | SPCC Appx. E   | ~100 gal. | Unclear if reached river  |
| Oct. 12,<br>2010                       | Turbine Oil                         | "MU # 11 has a pump in<br>turbine pit to pump out<br>water seepage. The pump   | SPCC Appx. E   | ~75 gal.  | Unclear if reached river  |

| [         | T           | T                            | T            | T        | T                  |
|-----------|-------------|------------------------------|--------------|----------|--------------------|
|           |             | was not working, causing     |              |          |                    |
|           |             | water to accumulate in the   |              |          |                    |
|           |             | turbine plate displacing oil |              |          |                    |
|           |             | out of the turbine oil       |              |          |                    |
|           |             | sump."                       |              |          |                    |
| May 20,   | Turbine Oil | Turbine 12; cause            | ERTS 620026  | 200 gal. | Low oil alarm      |
| 2010      |             | unknown                      | and SPCC     |          | sounded – 200 gal. |
|           |             |                              | Appx. E      |          | missing from       |
|           |             |                              |              |          | turbine since      |
|           |             |                              |              |          | inspection 1 week  |
|           |             |                              |              |          | prior; no sheen    |
|           |             |                              |              |          | seen in river but  |
|           |             |                              |              |          | sheen seen in      |
|           |             |                              |              |          | turbine pit        |
| Feb. 25,  | Hydraulic   | "spillway gate heater north  | SPCC Appx. E | < 1 gal. |                    |
| 2010      | fluid       | oil line on bay 8 was put in |              |          |                    |
|           |             | operational mode. Oil        |              |          |                    |
|           |             | leaked out of access/clean   |              |          |                    |
|           |             | out point."                  |              |          |                    |
| Oct. 8,   | Turbine Oil | "MU #12 was put back         |              | < 1 cup  |                    |
| 2009      |             | into service after a 5-year  |              |          |                    |
|           |             | overhaul. A small sheen      |              |          |                    |
|           |             | developed upon startup but   |              |          |                    |
|           |             | quickly dissipated.          |              |          |                    |
| Feb. 28,  | Motor Oil   | Navigation Lock gate oil     | ERTS 611364  | 10 gal.  |                    |
| 2009      |             | heater leak – equipment      | and SPCC     |          |                    |
|           |             | failure                      | Appx. E      |          |                    |
| Feb. 12,  | Turbine Oil | Start up of Main Unit 10     | ERTS 611070  | 1 gal.   |                    |
| 2009      |             | after being down for         | and SPCC     |          |                    |
|           |             | repairs                      | Appx. E      |          |                    |
| April 10, | Unknown     | "An oil sheen appeared in    | SPCC Appx. E | Unknown  |                    |
| 2008      |             | MU #10 gate slots.           |              |          |                    |
|           |             | Maintenance concluded        |              |          |                    |
|           |             | that it was left over oil    |              |          |                    |
|           |             | residue from when Unit       |              |          |                    |
|           |             | was taken out of service     |              |          |                    |
|           | 0:1         | for its 6 year overhaul."    | GDGG 4 =     |          |                    |
| Aug. 20,  | Oil         | "An oil sheen appeared in    | SPCC Appx. E | < 1 gal. |                    |
| 2007      |             | MU #9 gate slots.            |              |          |                    |
|           |             | Assumption as that it was    |              |          |                    |
|           |             | coming from the drive        |              |          |                    |
|           |             | motor on the STS screen."    |              |          |                    |

#### McNARY DAM

Latitude: 45°56'08" N Longitude: 119°17'53" W

The following table summarizes pollution discharges from the McNary Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the McNary Dam.

| Reported          | Reported   | Reported Cause  | Source of   | Reported   | Comments  |
|-------------------|--|---|---|--|---|
| Date              | Pollutant  | •   | Report  | Amount   |   |
| Sept. 18,<br>2012 | Lube oil   | "caller reported that a<br>miter gate discharged<br>a drop of miter oil."   | NRC Report<br>No. 1024819   |  |   |
| July 19,<br>2012  | Unknown sheen                                    | "the sump"  | NRC Report<br>No. 1018266   |  |   |
| Feb. 21,<br>2012  | Either<br>assembly/gear<br>oil or turbine<br>oil | Unit 1 started after a rebuild  | ERTS 632248   | 10' x 10'<br>sheen   |   |
| Nov. 23,<br>2011  | Oil  | Crane on dam dropped grease   | ERTS 630571,<br>U.S. Army<br>Corps of<br>Engineers After<br>Action Report,<br>and Spill<br>Prevention,<br>Control, and<br>Countermeasure<br>Plan (SPCC) | 4 drops of grease  | "McNary crew was removing gear boxes on crane #5"; Crane used for trash collection and hangs over water |
| May 12,<br>2011   | Turbine Oil                                      | Cracked sight glass on unit # 6 that released oil to turbine pit and to a drainage sump. The drainage sump accessible from dam elevation 264 discharges into the tailrace of the Columbia River | U.S. Army Corps of Engineers After Action Report and SPCC   | 430 gal.<br>lost from<br>unit, < 10<br>gal. to<br>river; sheen<br>observed |   |
| Dec. 21,<br>2010  | Gear grease                                      | Grease was being cleaned off of gears during cleanup work   | ERTS 624152,<br>SPCC, and U.S.<br>Army Corps of   | 2 drops  | "during cleanup<br>of excess grease<br>from upstream  |

|                  |             | due to a lock outage, and grease dropped   | Engineeres<br>After Action<br>Report   |          | miter gate"; at<br>Navlock   |
|------------------|-------------|--|--|----------|--|
| March 30, 2010   | Grease      | Dislodged piece of grease fell into river upstream of the upstream miter gate                          | SPCC   |          |  |
| Jan. 31,<br>2010 | Unknown     | Unknown  | U.S. Army Corps of Engineers After Action Report                                       | Unknown  | Sporadic Oil<br>sheens appeared<br>in fore bay river<br>side slots   |
| Feb. 23,<br>2009 | Unknown oil | Oil discharged while changing piping on drainage sump; oil sucked into sump when water in sump got low | ERTS 611216,<br>U.S. Army<br>Corps of<br>Engineers After<br>Action Report,<br>and SPCC | < 1 gal. | "An oil/water separation system project is on the agenda for McNary and is a potential remedy for this problem."; sheen observed after discharge pump 4 was started, source of sheen is discharge sump |

### ICE HARBOR DAM

Latitude: 46°14'58" N Longitude: 118°52'47" W

The following table summarizes pollution discharges from Ice Harbor Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by Ice Harbor Dam.

| Reported | Reported    | Reported Cause                          | Source of          | Reported      | Comments          |
|----------|-------------|---|--------------------|---------------|-------------------|
| Date     | Pollutant   |   | Report             | Amount        |                   |
| April 2, | Lube        | "believed to be caused                  | ERTS 640360        | 4 ft. x 4 ft. |                   |
| 2013     | Oil/Motor   | from fresh grease on the                |                    | sheen         |                   |
|          | Oil         | lock cables"                            |                    |               |                   |
| March    | Lube        | Release of turbine oil                  | ERTS               | 1 gallon      |                   |
| 29, 2013 | Oil/Motor   | during startup                          | 640280; NCR        |               |                   |
|          | Oil         |   | Report No. 1042442 |               |                   |
| March 8, | Oil         | "Cleaning some seals                    | NRC Report         | 1 gallon      |                   |
| 2013     |             | and some residual oil                   | No. 1040474        |               |                   |
|          |             | from an old system got into the water." |                    |               |                   |
| Nov. 17, | Turbine Oil | "A turbine generator                    | NRC Report         | 100' x 100'   |                   |
| 2012     |             | unit discharged turbine                 | No. 103931;        | sheen         |                   |
|          |             | oil."                                   | ERTS 63736         |               |                   |
| Oct. 25, | Hydraulic   | Hydraulic oil                           | NRC Report         | 1 cup         | Call reported a   |
| 2012     | Oil         | discharged from turbine                 | No. 1028316        |               | sheen             |
|          |             | bay due to the main unit                |                    |               |                   |
|          |             | being down                              |                    |               |                   |
| June 7,  | Lubricating | "unwatering pump"                       | NRC Report         | 1 gal.; sheen |                   |
| 2012     | Oil         | discharging residual oil                | No. 1013872;       | 30' x 30'     |                   |
|          |             | in the pit"                             | ERTS 634361        |               |                   |
| March 13 | Turbine oil | Discharge during                        | Various,           | 5 - 10 gal.   | Unit 3 has a      |
| -14,     |             | maintenance – starting                  | including          |               | known leak of     |
| 2012     |             | Unit 3 after transformer                | NRC Report         | (up to 40     | about 1 gal / day |
|          |             | cooler repairs and 30                   | No. 1005753        | gal.)         |                   |
|          |             | day shutdown                            |                    |               |                   |
| Feb. 27, | Transformer | Leak during transfer                    | Various            | 44 gal.       | Generator Main    |
| 2012     | oil         |   | including          |               | Unit 3; or TW-2   |
|          |             |   | NRC Report         |               |                   |
|          |             |   | No. 1004109        |               |                   |
| Feb. 22, | Oil         | Inadvertent tripping of                 |                    |               |                   |
| 2012     |             | a breaker that supplies                 |                    |               |                   |
|          |             | an oil trailer – TW-2                   |                    |               |                   |

| Sometime after June 2011 to Jan. 2012 | Transformer<br>oil (w/<br>PCBs) | Leaks in metal tubing     | Email / press<br>release | Estimated 1680 gal. | From T-1<br>transformer heat<br>exchange |
|---------------------------------------|---------------------------------|---------------------------|--------------------------|---------------------|--|
| Nov. 10,                              | "Oil"                           | Crack in turbine blades   |                          |                     |  |
| 2010                                  |                                 | – Main Unit #4            |                          |                     |  |
| Oct. 19,                              |                                 | Packing gland leaks at    |                          |                     |  |
| 2010                                  |                                 | three blades – oil leaked |                          |                     |  |
|                                       |                                 | at hub/blade interface    |                          |                     |  |
|                                       |                                 | requiring re-packing      |                          |                     |  |
| Nov.                                  | R&O 32                          | Tainter valve # 2 leaked  |                          | $\sim$ 5 gal.       |  |
| 2008                                  |                                 | due to cracked weld in    |                          |                     |  |
|                                       |                                 | flange                    |                          |                     |  |
| Oct. 17 -                             | DTE 30W                         | Unit 1 turbine guide      |                          | < 5 gal.            |  |
| 18, 2008                              | turbine oil                     | bearing was overfilled    |                          |                     |  |
| Nov. (28)                             | Turbine oil                     | Unit 3 started up after   |                          | < 10 gal.           |  |
| 2007                                  |                                 | sitting for 1 month       |                          |                     |  |
| Sept. 10,                             | Turbine oil                     | Discharge when start up   |                          |                     |  |
| 2007                                  |                                 | after being shut down     |                          |                     |  |
|                                       |                                 | for repairs               |                          |                     |  |
| Aug.                                  | R&O 32                          | Leak from intake gate     |                          | sheen               |  |
| 2007                                  | hydraulic oil                   | hydraulic cylinder        |                          |                     |  |

### LOWER MONUMENTAL DAM

Latitude: 46°33'46" N Longitude: 118°32'18" W

The following table summarizes pollution discharges from Lower Monumental Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Lower Monumental Dam.

| Reported<br>Date | Reported<br>Pollutant | Reported Cause  | Source of Report                            | Reported<br>Amount                         | Comments                            |
|------------------|-----------------------|---|---|--|-------------------------------------|
| Aug. 9,<br>2012  | Turbine Oil           | "Oil entered the sump of Unit 2. This was caused by high water level in the unit. The sump pump pumped some of the oil into the river."   | NRC Report No.<br>1020559; ERTS<br>635725   | 3 gallons                                  |                                     |
| Feb. 13,<br>2012 | Unknown<br>oil        | Believed to be pump that had a leak   | NRC Report No.<br>1002882                   |  |                                     |
| March 25, 2010   | Veg. Oil              | "working on a crane which leaked 5 gallons of food grade vegetable oil onto ground. An unknown amount went into a storm drain which flowed into the snake river creating a sheen" | NRC Report No. 935101                       | 5 gal.                                     |                                     |
| May 4,<br>2009   | Hydraulic<br>oil      | Release of oil to river from startup of Unit 2  | ERTS 612578                                 |  | 20 by 100<br>foot sheen<br>observed |
| March 11, 2009   | oil                   | Started Unit 1 after being shutdown since Dec.  | Email in DOE files                          |  |                                     |
| July 28,<br>2008 | Hydraulic<br>fluid    | Oil released into river upon startup of Unit 1  | ERTS 607295 and<br>NRC Report No.<br>878702 | 1 pint                                     |                                     |
| Jan. 22,<br>2008 | Hydraulic<br>oil      | "Hydraulic oil released from the generator unit 1 due to mechanical failure of a transfer onto ground and water"  | NRC Report No. 860303                       | 300 gal.<br>total, 150<br>gal. to<br>water |                                     |
| Dec. 14, 2007    | Hydraulic<br>oil      | Release from gate sill heater due to a piping leak  | NRC Report No. 857409                       | 1 gal.                                     |                                     |

## LITTLE GOOSE DAM

Latitude: 46°35'05" N Longitude: 118°01'38" W

The following table summarizes pollution discharges from Little Goose Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by Little Goose Dam.

| Reported<br>Date       | Reported<br>Pollutant | Reported Cause   | Source of<br>Report                         | Reported<br>Amount                   | Comments   |
|------------------------|-----------------------|--|---|--------------------------------------|--|
| Feb. 19,<br>2013       | Turbine Oil           | Two 4 x 4 feet sheens believed to be from Unit 1   | ERTS 639378;<br>NRC Report No.<br>1038863   | unknown                              |  |
| Jan. 2,<br>2013        | Turbine Oil           | While filling the bearing housing an estimated quart of oil was forced out of the sump and then discharged to the river, causing a sheen | ERTS 638456;<br>NRC Report No.<br>1034628   | 1 quart                              |  |
| March 25, 2010         | Diesel                | Unknown  | NRC Report No. 935069                       | 5 gal.                               | "release of diesel oil<br>from an unknown<br>source coming out of<br>the bottom of spill bay<br>#2 due to an unknown<br>cause. |
| Oct. 20 or<br>21, 2007 | Lube / motor oil      | Mechanical failure of<br>Generator 6   | ERTS 601516<br>and NRC Report<br>No. 852245 | "worst case" est. is 120 to 150 gal. | ½ mile sheen   |
| Sept. 26,<br>2007      | Turbine Oil           | Equipment failure on turbine seal  | NRC Report No. 849957                       | 1 quart                              |  |

### LOWER GRANITE DAM

Latitude: 46°39'33" N Longitude: 117°25'47" W

The following table summarizes pollution discharges from Lower Granite Dam reported in the Washington Department of Ecology's Emergency Response Tracking System (ERTS) and/or the U.S. Coast Guard's National Response Center (NRC) database, as well as public records obtained by Riverkeeper. Riverkeeper does not concede that the amount of pollution reported is, in fact, the amount of pollution actually discharged by the Lower Granite Dam.

| Reported<br>Date | Reported<br>Pollutant | Reported Cause        | Source of Report      | Reported<br>Amount | Comments |
|------------------|-----------------------|-----------------------|-----------------------|--------------------|----------|
| Jan. 2,          | Turbine Oil           | "lower guide bearing  | NRC Report No.        | 1 quart            |          |
| 2013             |                       | of the turbine unit." | 1034628               |                    |          |
| Dec. 4,          | Oil                   | Source unknown        | ERTS 637966           | 200' x 200'        |          |
| 2012             |                       |                       |                       | feet sheen         |          |
| March            | Hydraulic             | "human error" –       | Email in Washington   | 80 to 90           |          |
| 13, 2011         | fluid                 | operator overfilled a | Department of Ecology | gal.               |          |
|                  |                       | bearing in a turbine  | files                 |                    |          |